

Data Gap Investigation for Aerovox Interim Cap

1. DNAPL extent
 - a. 21 cores, 3ft or less in length
 - b. 2 samples each from top of native to bottom of native
 - c. Analyze for PCBs (IA) in sediment, VOCs in sediment, and NAPL (dye test).
2. Model Building
 - a. 3 cores, 20+ ft each with sonic drilled to bedrock
 - b. 15 samples, each core collects a sample from OL, marine, outwash, glaciolacustrine (if present), and glacial till
 - c. Analyze sediments for bulk density, particle size (sand, silt, clay), total carbon, particle density, sulfide/sulfate, pH, moisture content.
3. Groundwater Flux (drive points)
 - a. 55 drive point locations
 - b. Collected with stainless steel drive point at depths of 1 and 3 ft below sediment surface
 - c. Collect hydraulic head data for each depth
 - d. Collect physicochemical parameters for each depth (temperature, pH, specific conductivity, oxidation reduction potential, turbidity).
 - e. Upon stabilization, collect groundwater samples for each depth
 - f. Analyze 110 samples for PCBs, VOCs, methane, sulfide, total dissolved metals (Ca, Mg, Na, K, Fe, Mn), sulfate-chloride-nitrate, total alkalinity, dissolved organic carbon.
4. Groundwater Flux (passive samplers)
 - a. Deploy two passive samplers for 21 locations. One sampler at or just below the sediment surface and one suspended 1 ft above the harbor bottom
 - b. Analyze for PCBs and VOCs in water.
5. Physical characterization of ambient sediment
 - a. Locations?
 - b. # of samples?
 - c. Analytes?
6. Gas ebullition
 - a. Location(s)?
 - b. # of samples?
 - c. Analytes?
7. Wave and Current Energy
 - a. Locations?
 - b. # of samples/observations?
 - c. Parameters?
8. Ice impacts
 - a. Model Impacts?
9. Sea Level Rise

a. Model impacts?

10. Construction complexity/impacts?

11. Ecological functionality of cap?